Digital Hearing Aids Use New Recipes for Better Hearing

Digital hearing aids have been available commercially since Madison's own Nicolet Instrument Corp introduced the world's first digital hearing aid in 1989. For a variety of reasons, the Nicolet project ended in 1991 and it wasn’t until April of 1996 that Widex introduced the Senso in Behind-the-Ear and In-the-Ear styles. In April 1997, Widex was the first to introduce the Senso Completely-In-the-Canal (CIC). In 1998 it introduced the world’s first 100% digital hearing aid for severe to profound losses. Most major manufacturers have introduced digital hearing aids as well.

Digital signal processing means turning sound into numbers and back again. It is the clever manipulation of the numbers that makes each digital recipe unique. These mathematical recipes, called algorithms, distinguish one digital hearing aid from the other.

By using numbers to manipulate sound, digital hearing instruments can do things that conventional and programmable hearing instruments cannot do. Digital hearing aids automatically perform feedback suppression, speech enhancement, noise reduction, and pattern recognition. Digital hearing aids can also monitor the battery voltage resulting in less drain and increased battery life.

Precision and accuracy are features of digital hearing aids that benefit the user with accurate tuning of the response of the digital hearing aid. (Continued on page 2)
Exercise and Noise = Hearing Loss

Listening to loud music while exercising can cause increased hearing damage. Researchers studied three groups of 12 females aged 20-29. One group rode bikes for 20 minutes. The second group listened to loud music without exercising for 20 minutes. The third group exercised and listened to loud music for 20 minutes.

Researchers measured the hearing of the subjects before and after their test conditions. They found no change in hearing for those who only exercised. The second group who listened to loud music without exercising showed a shift in hearing from 4 to 5 dB at 3-6 kHz. The third group who exercised and listened to loud music showed the greatest decrease in hearing of 6 to 9 dB at 3-6 kHz.

Remember to keep the music turned down when you’re toning up!

Digital Hearing Instruments, cont.

(Continued from page 1) Digital hearing aids are being combined with directional microphones to improve hearing in difficult environments. User satisfaction is high. An independent study by Hall and Sandlin (1997), found that experienced hearing aid users preferred digital hearing aids over analog hearing aids. They were more satisfied with the performance when hearing in noisy environments and listening to music. In a separate study at Cleveland Clinic, users showed a significant preference for digital over conventional or programmable instruments. GN Danavox, Micro-Tech, Oticon, Resound, Siemens, Sonic Innovations, Telex, Philips, Maico, and others have released digital hearing aids. All are available at Audible Difference.

Learn more about digital technology at the Spring Seminar, or call Audible Difference for a personal consultation and demonstration of this exciting technology.

Hear what you’ve

WIDEX SENSO DIGITAL HEARING AID STYLES

- The Americans with Disabilities Act requires public facilities to provide accommodations for those with hearing losses.
- If you don’t ask for these accommodations, they won’t be there for you or the next person.
- Ask hospitals or hotels for signaling devices to alert you to fire alarms. Ask for telephone amplifiers and alarm clocks that vibrate or flash a light.
- Ask for wireless headphones at the theaters.
- Encourage your church to install wireless headphones.
- Ask for a written copy of the text or even an outline of the talk or sermon when you are in a large group.
Telephone Equipment Purchase Program provides money for special telephones

Audible Difference provides a variety of telephone equipment including:
- Amplified Phones
- Amplified Cordless Phones
- Custom and non-custom telephone headsets
- Induction loops and direct audio input connectors to connect your hearing aids directly to the phone
- Counseling about options to help with the phone
- Guidance to other facilities and resources
- 30-day money back trial on phone equipment

Call 273-3036 today for your free consultation.

Telephone Help

New models of telephones, are available to help improve communication on the phone.

One new cordless 900 mHz telephone provides 30 dB of gain. That is three times as loud as a regular phone. It also provides a headphone jack so you can plug a neckloop into the phone and connect it to a hearing aid with a telecoil (T-Switch).

Written communication helps. Use fax or email to send messages to family.

If you cannot distinguish what people are saying on the phone, a Voice Carry Over phone may be just the thing you have been looking for. Here is how it works: The person you are calling hears your voice just as they always do. When they talk, you can read what they are saying. An operator, called a “calling assistant (CA) types what the caller is saying so you can read it.

This phone is available in one line or two line models. With the one-line model, you cannot hear the voice of the person talking because only one phone line transmits information (voice or text) to you. With 2-phone line VCO, you can both hear and read what someone is saying to you.

These new phones also have built-in volume controls for regular phone calls and some have signalers as well.

This phone qualifies for the Telephone Equipment Purchase Program, governed by Wisconsin Administrative Codes s.160.07 and 160.071. This program is not based on income. You apply for a voucher and pay the first $100 for a hearing assistance phone. The balance is paid with the voucher.

To find out if this or other phone equipment would help your hearing needs, call Audible Difference (608) 273-3036.

Summertime...Hearing Protection Devices

Now is the time to stock up on hearing protection devices (HPDs)! Summer is filled with projects that often involve the use of power tools. Unfortunately, these tools can produce sound levels that damage your hearing.

The risk of hearing damage varies with the level of the sound and the duration of the exposure. For example, the average lawn mower is about 100 dB SPL. Safe working time without HPDs at this level is between 0 to 2 hours. If you reduced the level using HPDs to 90 dB SPL, you could work in the same level for 4 to 8 hours without risk to your hearing.

How do you know if HPDs are required? If you have to shout to be heard, you need hearing protection.

There are many styles of earmuffs and earplugs including custom earplugs. Each comes with a Noise Reduction Rating (NRR). Proper fitting is essential to get the listed NRR. Improper insertion, prespiration, and slippage can reduce the effectiveness of the HPD.

If you need information about the type of HPD that would work best for your ears, call Audible Difference. We can help you find the right earplug for your specific needs.
It’s time to dust off your spring wardrobe and get ready to attend Audible Difference’s annual Spring Seminar.

This year there is an evening dinner seminar on Friday, May 14 at 6:30 p.m. or a morning breakfast seminar on Saturday, May 15th at 10:00 a.m. Come to learn the latest information about the ear and how we hear. Learn about the latest research about how the ear can be mended. Find out about new types of hearing technology including digital hearing aids. Discover how to improve communication between you and all the important people in your life.

This year’s event promises to be filled with fun, learning, and door prizes galore. Space is limited, so call Audible Difference (273-3036) today to reserve a place for you and a friend. Lead the way to better hearing.